Certified Mail, Return Receipt Requested

July 26, 2017

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105

Attn: Title V Reports

Re: Semiannual Monitoring Report for Facility No. A0733

As required by Section I Part F of the subject Title V permit, the City of Sunnyvale Water Pollution Control Plant (Facility No. A0733) is submitting this Semiannual Monitoring Report for the period from January 1, 2017 through June 30, 2017. After reasonable inquiry, we conclude the following regarding this period of operation:

- There were no deviations during this period;
- All reports were submitted on time;
- All CEM QA procedures, methodologies, and maintenance were performed as required.

The monitoring required by this permit and the monitoring results are summarized below:

PGF Heat Input Limits Monitoring [Condition 10844 (2)]:

S-14 and S-15 gas throughput for each fuel type is monitored continuously at five second intervals on a daily basis, well in compliance with the required 15-minute interval. Monthly samples are collected from each fuel stream and analyzed for the high-heat value, which is used with the gas throughput to calculate the daily and consecutive 12-month total heat inputs to each engine. All calculated values were in compliance with the permitted limits of 200 MMBTU daily and 72,000 MMBTU rolling annual total over the entire reporting period.

PGF Annual Source Test [Condition 10844 (4, 6)]:

The Annual Source Test for S-15 was conducted on January 19, 2017. Analytical results were submitted to BAAQMD on February 23, 2017. All results were in compliance with the emission limits and regulations specified in the permit.

On January 3, 2017, Blue Sky Engineering, on behalf of the City, notified BAAQMD's Source Test Division via email that the source test for S-14 could not be performed within 12-months of the previous source test due to the engine being inoperable and in need of major repair. S-14 was put back online on June 5, 2017, and a source test for the engine was conducted within 30 days of operation of the engine, on

June 29, 2017. Analytical results for the S-14 source test will be submitted to BAAQMD once they have been received by the City. The City considers itself to have been in continuous compliance during this reporting period as the source test on S-14 was performed within 30 days of when the engine was put back into operation in accordance with guidance from the Source Test Division.

PGF Quarterly Emissions Monitoring [9-8-503, 9-8-302.1, 9-8-302.3]:

First and second quarter emissions monitoring events for S-15 were conducted on January 19 and May 11. Due to S-14 being inoperable for the entirety of the first quarter; first quarter emissions monitoring was not able to be conducted on the engine. S-14 was put back on-line on June 5, 2017, and second quarter emission monitoring was performed on the engine on June 9, 2017. All results were in compliance with the applicable emissions limits of 70 ppm NOx and 2,000 ppm CO. The City considers itself to have been in continuous compliance during this reporting period as emissions monitoring conducted for each quarter that the engines were in operation.

Sulfur Compounds Monitoring [Condition 19978 (2)]:

Total reduced sulfur compounds in the digester gas used to operate S-16, S-17, and S-18 are monitored quarterly. The results provided in the following table demonstrate compliance with the 1,550 ppmvd limit:

Total Reduced Sulfur Compounds – Draeger Tube Test results				
Sources: S-16, 17 & 18	Date of Test	Requirement	Result ppmv (dry)	Compliant (Y/N)
Third Quarter Sampling:				
Digester Gas	1/18/2017	19978 (2)	500	Y
Fourth Quarter Sampling:				
Digester Gas	4/5/2017	19978 (2)	800	Y

Landfill Gas Component System Leak Testing [8-34-301.2]:

First and second quarter monitoring events were conducted on March 22 and June 22, 2017, to identify any presence of organic compound concentrations above the permit limit of 1,000 ppmv, measured as methane, associated with the landfill gas system components on the facility.

During the first quarter monitoring event, component/leak emissions testing of the LFG conveyance piping was performed and detected methane gas concentration up to 2,000 ppmv at the PGF No. 1 (S-14) blower outlet isolation valve. City personnel performed immediate replacement of the valve and gasket, and retesting was performed that same day, indicating that methane concentrations had returned to below compliance limits. No other compliance issues were detected during this reporting period.

RICE Oil Change Frequency [Table 2d.13 of NESHAP 63.6603(a)]:

During the reporting period, there was no exceedances of the oil and filter change and hose and spark plug inspection 1,440-hour limit established in Table 2d.13 of NESHAP 63.6603(a) for all applicable RICE engines at the facility.

Landfill Gas Emission Control System [8-34-113.2]:
During the reporting period, the LFG emission control system was in compliance with the shutdown time limitation of ≤ 240 hours/year.

Emergency Blackstart Generator Reliability-Related Activities [Condition 19929 (3)]:
During the reporting period, reliability-related activities performed on the emergency blackstart generator (S-19) were in compliance with the limitation of ≤ 100 hours/year.

I am the responsible person for the City of Sunnyvale Water Pollution Control Plant, and I certify that this report is true, accurate, and complete.

Please contact Melody Tovar at (408) 730-7740 if you have any questions or comments on this report.

Sincerely,

Kent Steffens
Assistant City Manager and Interim Director,
Environmental Services Department

cc: Alfonso Borja Jr., BAAQMD – *email*